

## **COUNTRY EXPERIENCE IN LAND ISSUES**

# **JAMAICA**

by

## Mrs. Jacqueline daCosta

Permanent Secretary
Ministry of Land & Environment

Under Subcontract to Development Alternatives, Inc. Financed by U.S. Agency for International Development, BASIS IQC LAG-I-00-98-0026-0

April 24, 2003

## **Table of Contents**

| 1.   | COUNTRY PROFILE   | 1  |
|------|---|----|
| 1.1. | GEOGRAPHY   | 1  |
| 1.2. |   |    |
| 1.3. | ECONOMY   | 1  |
| 1.4. | SOCIAL CONTEXT  | 2  |
| 1.5. | GENDER  | 2  |
| 2.   | MAJOR LAND ADMINISTRATION AND MANAGEMENT ISSUES                         | 4  |
| 2.1. | THE NATIONAL LAND POLICY  | Δ  |
| 2.1. |   |    |
| 2.3. |   |    |
| 2.4. |   |    |
| 3.   | INFORMATION TECHNOLOGY  |    |
| 3.1. |   |    |
| 3.1. |   |    |
| 3.2. |   |    |
| 3.4. |   |    |
| 3.5. |   |    |
|      |   |    |
| 4.   | OWNERSHIP, ACCESS AND SECURITY OF TENURE                                | 15 |
| 4.1. | OWNERSHIP, ACCESS AND SECURITY OF TENURE ISSUES                         | 15 |
| 4.2. |   |    |
| 4.3. |   |    |
| 4.4. |   |    |
| 4.5. |   |    |
| 4.6. |   |    |
| 4.7. |   |    |
| 4.8. | Indigent Housing  | 24 |
| 5.   | ${\bf CADASTRAL\ MAPPING, CLARIFICATION\ AND\ TENURE\ REGULARIZATION\}$ | 24 |
| 5.1. | CADASTRAL, MAPPING, CLARIFICATION AND TENURE REGULARIZATION ISSUES      | 24 |
| 5.2. |   |    |
| 5.3. | PROGRAMME ACTIVITIES  | 26 |
| 5.4. | GENERAL PROGRAMME ISSUES  | 27 |
| 6.   | SUSTAINABLE DEVELOPMENT PLANNING  | 29 |
| 6.1. | SUSTAINABLE DEVELOPMENT PLANNING ISSUES                                 | 29 |
| 6.2. | LAND USE PLANNING   |    |
| 6.3. | A PARTICIPATORY MODEL   | 30 |
| 6.4. | PLANNING ACTIVITIES   | 31 |
| 6.5. | Urbanization  | 31 |
| 7.   | MANAGEMENT OF LANDS   | 33 |
| 7.1. | MANAGEMENT OF LAND ISSUES   | 33 |
| 7.2. |   |    |
| 7.3. | PARKS AND PROTECTED AREAS   | 35 |
| 7.4. | COASTAL ZONE MANAGEMENT, ISSUES AND CHALLENGES                          | 36 |
| 7.5. | LAND MINING   | 36 |
| 7.6. |   |    |
| 7.7. | Management Of Land Programmes   | 39 |

| 8.               | INSTITUTIONAL FRAMEWORK AND REFORM           | 40 |
|------------------|--|----|
| 8.1.             | INSTITUTIONAL FRAMEWORK AND REFORM           | 40 |
| 8.2.             | THE NATIONAL LAND AGENCY                     | 40 |
| 8.3.             | THE NATIONAL ENVIRONMENT AND PLANNING AGENCY | 41 |
| 8.4.             |  |    |
| 8.5.             | Training                                     | 44 |
| 9.               | CONCLUSION AND RECOMMENDATIONS               | 47 |
| 9.1.             | CONCLUSION AND RECOMMENDATIONS               | 47 |
| A                | PPENDIX I: Key Social Indicators             | 50 |
| $\boldsymbol{A}$ | PPENDIX II: Key Land Indicators              | 51 |
|                  | PPENDIX III: Adjudication                    |    |
|                  |  |    |

#### ACKNOWLEDGEMENTS

I thank the Inter-American Development Bank, the United States Agency for International Development, the British Department for International Development and the Government of the Republic of Trinidad and Tobago for organising the learning workshop on Land Policy, Administration and Management. Jamaica welcomes the opportunity to share with member states in the English speaking Caribbean, its experiences in the area of land policy, administration and management as well as specific policies and programmes that have been developed, many of which are still being implemented.

My warmest appreciation to the members of staff of the Ministry of Land and Environment who contributed to the preparation of the document and in particular, special thanks to Miss Cecille Blake and Mr. Donovan Phillips.

I also wish to acknowledge all the organisations that provided information and statistical data required.

- The National Environment and Planning Agency
- The Ministry of Local Government and Community Development
- The Land Administration and Management Programme
- The Statistical Institute of Jamaica
- The National Land Agency, Land Titles Division
- The Kingston Restoration Company
- The Planning Institute of Jamaica

Jacqueline daCosta

Case Study
Prepared by Mrs. Jacqueline daCosta
Permanent Secretary
Ministry of Land & Environment
Kingston, Jamaica
March 2003

## LIST OF ACRONYMNS

CAST College of Arts, Science and Technology, Jamaica

CDB Caribbean Development Bank
CZM Coastal Zone Management

ECLAC Economic Commission for Latin America and the Caribbean

EFJ Environmental Foundation of Jamaica

GCT General Consumption Tax GDP Gross Domestic Product

GIS Geographic Information System

GOJ Government of Jamaica
GPS Global Positioning System
ICRP Innercity Renewal Programme
IDB Interamerican Development Bank

JAD69 Jamaica Datum of 1969

JaNEAP Jamaica National Environmental Action Plan

JSIF Jamaica Social Investment Fund KRC Kingston Restoration Company

LAMP Land Administration and Management Programme

LICJ Land Administration Council of Jamaica

NCDA National Council of Drug Abuse

NEPA National Empowerment and Planning Agency

NGO Non Governmental Organisation

NLA National Land Agency

NSDI National Spatial Data Infrastructure

PRIDE Programme for Resettlement And Integrated Development

Enterprise

SDC Social Development Commission

SBLM School of Building and Land Management

STATIN Statistical Institute of Jamaica WGS84 World Geodetic System of 1984

USAID United States Agency for International Development

UTech University of Technology, Jamaica UWI University of the West Indies

## 1. COUNTRY PROFILE

## 1.1. Geography

Jamaica is the third largest island in size and the largest English-speaking island in the Caribbean with an area of 10,991 sq. km. It has a diverse geography of volcanic-formed mountains, fertile plains, rain forests, swamps, and a coastline that varies from rocky cliffs to white-sand beaches. Agriculture, including fisheries, forestry and pastures occupies over half of the country's land area.

## 1.2. Demography

The current population is estimated at 2.6 million with some 55 percent living in urban areas. Kingston, the capital city, is the commercial centre and seat of Government, and has a population of about 716,000. The current growth rate of 0.6 percent in 2001 has been consistent with the National Population Policy target for a growth rate below 0.8 percent over the medium term and a projected population size of under 3.0 million by the year 2020. This growth rate has been consistently below 1.0 percent since 1997. The downward trend is desirable in light of national policy for achieving a stable population at zero growth. This decline in the growth rate is influenced mainly by continuing high levels of emigration rather than declines in fertility and it may have serious repercussion for national development.

## 1.3. Economy

Jamaica has historically had an open economy. It has faced periodically depressed and highly competitive markets for its principal exports and sources of foreign exchange (bauxite, alumina, agriculture, light manufactured goods and tourism). A rapid liberalisation policy in the nineties further weakened the position of exporters. By 1995, the Government of Jamaica (GOJ) faced large fiscal deficits and significant public sector debt. Under the weight of nonperforming loans and inflated real estate investments, the rapid proliferation of financial institutions in the wake of liberalization, an inadequate regulatory framework, and poor and unacceptable management practices led to serious problems with the country's financial system in 1996. Between 1990-2000, per capita GDP (at constant prices) declined at an annual rate of nearly 0.7 percent, while official unemployment remained over 15 percent and per capita real income fell annually from 1993. It is believed that remittances from Jamaicans living abroad, an expanding informal sector, and the underground economy of which the production and trade in illicit drugs are assumed to be a significant component have been largely responsible for keeping the country afloat.

Jamaica's production activities were reduced in certain areas during the years when the purchase of government bonds provided greater returns than most productive investments. Economic growth has, however, been increasing with the Government providing an enabling environment to stimulate and encourage innovation in value-added products as well as providing assistance in marketing.

Real Gross Domestic Product (GDP) in 2001 increased 1.7 percent compared with 2000. The growth in real GDP was due mainly to the continued growth in transport, storage and communications, the recovery in agriculture and mining (including quarrying) output, and an increase in construction and installation activities. Manufacturing, distribution and financial services registered smaller, but positive contributions to growth. Miscellaneous services was the only major sector that recorded a decline in output.

#### 1.4. Social Context

Jamaica is classified as a country of 'medium human development', whose social indicators compare favourably with many Latin American countries. The capacity of the State to fund and deliver social services and their supporting infrastructure has been reduced due to financial and economic problems. Jamaica ranks 78<sup>th</sup> among 174 countries with a Human Development Index of 0.738 and a life expectancy that continues to increase.

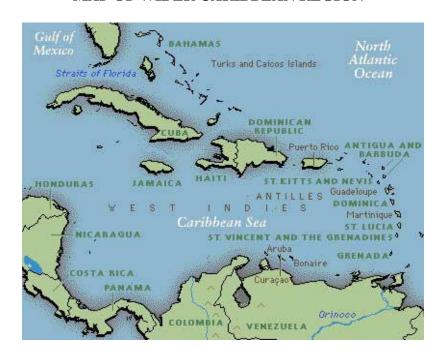
Social cohesion and unity around common issues is one casualty of economic stagnation, as is political tribalism. Survival strategies such as stealing, sex-related activities and showing respect to community "Dons" are more and more individualist and socially destructive. Deep divisions within the Jamaican society underline these phenomena. The national motto "Out of Many One People" is still a worthy goal for a people that remain deeply divided into the "haves" and "have-nots", rural and urban, uptown and downtown, and the different shades between black and white.

## 1.5. Gender

According to standard indicators, gender differences do not contribute to inequalities in human development in Jamaica. Women in Jamaica won the right to vote and to contest election in 1944. For at least the past three decades, Jamaican females have exceeded males in primary and secondary enrollment, mean years of schooling and literacy, in part due to the decline in educational participation and achievement among males.

Women in rural settings have always borne both productive and reproductive responsibilities, but their labour is poorly paid and little counted. Jamaican women have less access to productive resources such as land and credit, than men. In the professions, women are strongly represented in middle management, but are still rarely present in upper management. Women hold only 10% of senior positions in the country (most of these positions are in the public sector), despite the fact that they account for more than two-thirds of the university graduates.

## MAP OF WIDER CARIBBEAN REGION



MAP OF JAMAICA Showing Major Parishes and Towns



# 2. MAJOR LAND ADMINISTRATION AND MANAGEMENT ISSUES

## 2.1. The National Land Policy

The National Land Policy of Jamaica was tabled in Parliament in July, 1996. It recognized the finite nature of Jamaica's land resources and the need to correct decades of indiscriminate use and poor development practices. The Government coordinated the preparation of the policy by employing a broad-based participatory and consultative mechanism. Consideration was given both to the terrestrial areas, some 10991 square kilometers, and to territorial waters, approximately 25 times the size of Jamaica, as well as the atmospheric and sub surface areas.

## 2.2. Goals and Objectives

The objectives of the policy are to ensure the sustainable productive and equitable development, conservation, use and management of the country's natural and man-made resources and promote comprehensive and integrated development in urban and rural areas. Measures to achieve these goals and objectives include equity and fairness in access and distribution of land, economic diversification, and the development of centres of growth as appropriate.

The Policy aims to complement socio-economic development plans and programmes including poverty eradication, while challenging and seeking to remove inefficient, onerous and outdated legal, administrative, management and other barriers. The Policy specifies the development and implementation of a rational set of strategies, programmes and projects so as to facilitate stable and sustainable development.

## 2.3. A Policy fashioned by Jamaicans

The broad-based participatory process used to develop the National Land Policy over several years established the framework which enabled many Jamaicans to become more conscious of how best to protect and develop the country's resources.

The National Land Policy was a product of love and labour done free of charge involving several hundred Jamaicans for the well-being of Jamaicans. Inputs were made by the public and private sector organizations and individuals as well as professionals, NGOs, community, educational, religious and special interest groups. It was the subject of discussion in many parts of the island through public forums. The draft policy was also commented on by members of bilateral and multilateral financial institutions and knowledgeable experts from across the world.

## 2.4. Land Issues

The policy recognised that failure to adopt appropriate rural and urban land policies and prevailing land management practices was a primary cause of inequity, poverty and inadequate economic development. It also identified many of the critical land issues in the country, the causes of problems such as degradation of forests and watersheds, scattered and linear development, unplanned urban development, squatting, illegal development activities, occupation of hazard prone and other unsuitable areas, increased living costs, environmental pollution, and increased vulnerability affecting the nation, especially the disadvantaged, and low income earners.

The policy is comprehensive and includes chapters that detail the issues, policies, programmes and projects related to the following subject areas:

- Geographic Information Systems
- Land Resources and Land use
- Land Titling, Tenure and Access
- Acquisition, Pricing and Divestment of Government owned lands
- Taxation
- Incentives for Property Development
- Environment, Conservation and Disaster Preparedness
- Management of Lands with Specific reference to Government owned lands
- Legislation
- Institutional Framework and Reform

The following is a more comprehensive list of the issues. These were all dealt with in the National Land Policy, where accompanying strategies, programmes and projects to address them were outlined.

## **Land Administration and Management Issues**

- Lack of sustainable/integrated development plans – national, regional, local and where they exist not realistic or even directional in what could be implemented, taking into consideration realistic time frames, financial and human resources
- Inadequate information on land and land matters and information not easily retrievable or accessible
- Rapid urbanization and urban sprawl

- Planning, infrastructure and utility standards that are not affordable to the majority of people and unwillingness to develop and legally use starter/minimum standards, with policies and programmes for incremental development
- Large scale squatting and capturing of public and private sector land for all types of uses
- Illegal/non-conforming uses

## **Land Administration and Management Issues**

- Scattered small human settlements and linear urban development
- Inadequate or no plans to deal with territorial waters and exclusive economic zones
- Use of Economic instruments, example, incentives and subsidies, without any analysis of environmental and social impacts of some developments
- Inadequate infrastructure roads, sewerage and water. This is compounded by the economic dependency on tourism in several parts of Jamaica and in the Caribbean as well
- Illegal sub-division and sale of land
- No resolution of "family land" issues
- Inappropriate pricing and taxation of land
- Marginal lands being made available to farmers for agricultural purposes
- Lack of consistent and viable strategies and programmes for making lands available to the masses, resulting in unavailability of affordable lands and insecurity of tenure
- Pollution of surface and underground water as well as harbours, coastal and marine areas
- Inadequate national capability to plan and manage, given present modus operandi
- Chemical and thermal pollution from

- Limited access to affordable lands with secure tenure
- Unavailability of lands and insecurity of tenure
- Occupation of hazard prone areas, such as river banks, steep hillsides etc.
- Some fifty seventy percent of housing solutions in Jamaica and the Caribbean are being undertaken by the informal sector with no approvals for planning, building or infrastructure
- Insufficient recreational facilities
- Inadequate development of beach facilities
- Illegal quarrying, including sand mining
- Poor or non existent marine and coastal zone management
- Inadequate or non existent waste (solid, liquid and toxic/hazardous) management programmes
- Poor environmental practices and protection for environmental sensitive areas
- Pollution of the environment from industrial and tourism development
- Reclamation and clearing of wetlands

## **Land Administration and Management Issues**

- oil, refining and spills, agricultural herbicides, insecticides, pesticides, industrial and domestic pollution
- Nutrient loading from sewage and fertilizers
- Sediment loading from soil erosion, sand dredging, construction etc
- Solid waste garbage especially plastic, and trash from hotels, beaches, boats
- Introduction of exotic species
- Watershed degradation and species/biodiversity loss
- Soil erosion
- Limited role of private sector and professional organizations involvement in the policy formulation and management of environment and natural resources
- Limited and poorly organized and managed monitoring and enforcement capacity within the public sector
- Inadequate penalties and fines and complex procedures to deal with planning and environmental offences
- Inadequate sustainable development plans and programs

- and mangroves for development and settlements
- Ill planned tourism development, water and road projects
- Poor agricultural practices and limited extension services
- Under utilization and inefficient use of arable lands, abandonment of private lands – absentee owners
- illegal sand mining, shrimp production
- Deforestation for fuel, posts, lumber and other uses with no real programs for reforestation or special plantations
- Inadequate/archaic laws
- Over fishing and hunting
- Over collection of endangered species and eggs, use of guns, bleach, dynamite, etc.

- Regulations required to administer laws, even when laws are in place, are not being finalized
- Limited delegation of policy formulation and planning to local levels and limited provisions for locally initiated programmes
- Lengthy and complex bureaucratic requirements affecting the few who for financial and other reasons are part of the formal economy

The National Land Policy reinforces other inter-sectoral development policies such as the Social Partnership and the Industrial Policy. It is comprehensive and identifies sustainable strategies for the use of land resources in Jamaica's agenda for social and economic development. It also addresses the legal and institutional mechanisms, and the need to modernize and adopt modern technology to facilitate efficient and effective implementation.

The following chapters will examine in some detail the main challenges and issues related to land administration and management in the island, look at the policies that have been framed, and the programmes and projects that have been, or are being, implemented to address them.

## 3. INFORMATION TECHNOLOGY

## 3.1. Information Technology Challenges

Information and communication technology is changing the way business is being done and the way people communicate with each other. It continues to create opportunities by offering more choices and options and it allows for easier and increased access to information and services.

The Ministry of Land & Environment has been providing the governance and leadership needed to create and sustain modern land administration and management systems. These systems are being put in place to facilitate the efficient and effective use of the finite land and land related resources for the advancement and well being of the Jamaican people.

The importance of geographic information as a crucial part of the Nation's information infrastructure has been recognised and the government has been making the necessary investments, albeit with limited resources, to implement a national geographic data management system.

In addition the Government of Jamaica through the Public Sector Reform Programme is spearheading the use of information and communication technology to manage in a more innovative, integrated, coherent and coordinated manner, measure efficiency and improve the planning processes of government.

## 3.2. Policy Goals and Objectives

The country's geographic data management polices and objectives were enunciated in the National Land Policy of 1996. These include the development and implementation of land information systems and practices for proper planning, development and management of land and ensuring that land and land related data are readily available as a tool for a variety of other activities. This is being done through the development and implementation of a National Networked Geographic Information System (GIS) action plan and programme and includes

the establishment of a National Spatial Data Management Centre. Government has decided that all land and land related information created by Government and its agents are the corporate resource of the state.

The major policy objectives are as follows:

- To create a National Spatial Data infrastructure to facilitate the effective and efficient management of land resources and to ensure informed and correct decision making on land related matters
- To create national standards for geographic data collection, storage and exchange
- To establish a National Spatial Data Management Centre
- To develop human resources to manage and operate the National GIS centre and other GIS facilities
- To create digital geographic information databases
- To develop user mechanisms and tools to facilitate access to land and geospatial information

These polices and objectives were created to guide the development and growth of geographic data management in Jamaica.

Government's overall information technologies objectives under the Public Sector Modernization Vision document are:

#### Joined-up Government

To improve cost-effective and focused delivery of Government service to citizens

#### Transparency and accountability

To achieve accountability at a higher level in the management of public resources

#### Government as an enabler

To foster closer working relationship between itself and the business/productive sector, to improve productivity and access to services by citizens by making the transactions with government simple, accessible and cost-effective.

## 3.3. The Land Information Council of Jamaica

Over 10 years ago a small group of visionaries decided that it was important to use modern technology to improve the way in which land information was used to support critical decisions in government. This early vision, with Cabinet's approval in1991, led to the creation of the Land Information Council of Jamaica, (LICJ). Today the LICJ coordinates and executes the GIS policies, as stated in the National Land Policy technical programmes and projects for the development of geographical information systems for Jamaica.

Throughout the years, the LICJ has fostered the understanding and acceptance of GIS as a tool for geospatial data management and decision making and has pioneered the growth of the geo-informatics industry in the island. The Council has been coordinating the development of digital data standards and geographic information systems policies and strategies, the preparation of position papers, the creation of digital data sets, and delivery of GIS training to executives, managers, supervisors and technicians.

It is worthy to note that all the activities that have been executed by the Council have been accomplished through the commitment and voluntary participation of over 40 government agencies, statutory bodies, professional organisations and the private sector. These organisations have all recognised the benefits to be gained from a national GIS infrastructure and have selflessly given of their time and effort to this national cause.

## 3.4. Information technology programmes

GIS, remote sensing, spatial database, global positioning systems, internet/web technologies are being applied in areas such as land management, infrastructure and facilities management, environmental monitoring and management, urban planning and forecasting, mining and vehicle routing, among other land and business related uses in the government and the private sectors. The following details a number of GIS and related technology initiatives that are being undertaken to improve the administration and management of land.

## 3.4.1. National Spatial Data Infrastructure

The Government of Jamaica through the Land Information Council of Jamaica (LICJ) is working to establish a national spatial data infrastructure (NSDI). The NSDI may be defined as the technologies, policies, and people necessary to promote sharing of geospatial data throughout all levels of government, the private and non-profit sectors, and the academic community.

#### The major goals of the NSDI are to:

- 1. reduce duplication of effort among Ministries and agencies,
- 2. improve quality and reduce costs related to the creation and dissemination of spatial information,
- 3. make spatial data more accessible to the public,
- 4. increase the benefits of using available data, and
- 5. establish key partnerships with academia and the private sector to increase spatial data availability.

#### 3.4.2. Establishment of a National GIS Centre

Within the next two years a centralized technical unit, "A National Spatial Data Management Centre" will be established to provide coordination and

technical support required to implement and maintain the national GIS network.

The network is being implemented to facilitate the sharing of geospatial information across government agencies in Jamaica. This system will consist of five Data Marts accessing a Spatial Data Clearing House of the National Spatial Data Management Centre over a Wide Area Network.

#### **Data Marts**

- Land Management
- Planning and Environment
- Development, Demography and Socio Economic
- Utilities
- Security

Each Data Mart will consist of agencies involved in similar activities. For example, the Planning and Environment Data Mart will consist of the National Environmental and Planning Agency, the Ministry of Agriculture the Kingston and St. Andrew Corporation, the Parish Councils, and the Water Resources Authority among others. Common-interest spatial data, such as the cadastral index database and the topographic maps will be published and disseminated by the Centre/NLA. A national geospatial data publishing clearinghouse program will administer data dissemination and pricing policies established by the LICJ. These data will continue to be updated by the appropriate data source agencies within each Data Mart.

## 3.4.3. GPS Network

Over the past 5 years there have been significant advancements and improvements in technologies, such as global positioning systems and remote sensing, that support many functions of government. The widespread use of global positioning systems for automatic vehicle location, land surveying and mapping, and the availability of high resolution maps at affordable costs have allowed users access to a multiplicity of spatial data management applications and solutions, the significant benefits of which can be realised from their use and implementation.

The Ministry of Land & Environment has been preparing the groundwork required to create an environment conducive to the development and use of these technologies. International agencies and organisations have standardized and prepare their products, in the World Geodetic System of 1984 (WGS84) reference frame. Jamaica's coordinate, geographic and mapping data are based on the Jamaican Datum of 1969 (JAD69). JAD69 coordinates are not compatible with WGS84 and poses a challenge when one needs to access GPS and remote sensing information sets and products

created in WGS84. The decision was therefore taken to change to the WGS84 datum based on a phased plan of action.

Another important decision was to establish a modern national geodetic infrastructure comprising geodetic control points, and other geodetic facilities compatible with GPS. A total of eight stations will be installed in strategic locations during-2003. These stations will provide GPS coverage for the entire island. They will supply real time and post-processed survey quality positions at 1 and 2 centimeter accuracies to roving GPS users. The existence of this GPS infrastructure and the use of GPS equipment will significantly reduce the time and effort taken and expended to conduct location based measurement activities such as land surveying and mapping. It will also allow for other business opportunities such as vehicle location and navigation, fleet monitoring, and enhanced emergency response systems.

#### 3.4.4. E-Government

## 3.4.4.1. NLA's eLandjamaica

A number of initiatives in support of e-government have been launched. In January 2003 the National Land Agency introduced eLandjamaica. It is an internet based service that provides selected title, valuation and digital map information to the agencies customers that wish to subscribe, 24 hours a day, 7 days a week.

Services available to the customer are the following: basic property search; advanced property search; sales search; interactive map and survey monument search.

## **The Basic Property Search**

This is a simple search to find the valuation and or the volume and folio numbers for parcels. There is no cost for accessing this service.

#### **Advanced Property Search**

Customers are allowed to view and print information from the valuation and titles databases. Searches can be done using items such as property addresses, valuation numbers, deposited plan numbers, strata plan numbers and volume and folio numbers.

#### **Interactive Map**

This service allows users to locate districts and identify the general location of properties using GIS.

#### **Survey Monument**

This facility provides online search access to data on survey control points.

In the initial phase of operation customers will be able to access some 380,000 scanned Certificates of Titles and all the active caveats associated with them. Customers will also have access to 1,500 strata and 45,000 deposited plans, over 680,000 valuation roll reports and scanned copies of the valuation enclosure plans for Kingston, St. Andrew and St. James. These services can be accessed through the agencies web site at <a href="https://www.nla.gov.jm">www.nla.gov.jm</a>.

3.4.4.2. Geoinformatics Training and Public Education and Awareness One of the major areas identified as critical to the development and sustainability of the national spatial data infrastructure is the implementation of on-going training in GIS and related disciplines. Associated with this is also the need to create an environment which nurtures and retains dedicated and proficient staff. The LICJ manages a GIS training laboratory that offers short technical courses to assist in the development of GIS competencies within the public service and, to a lesser extent, the private sector. The center offers 6 courses: Introduction to ArcView & Extensions, Introduction to GIS, data Automation, Data Analysis, GIS Database Design and Executive GIS, which range from 32 to 40 hours of intensive theory, application and hands-on sessions.

To maintain viability and sustainability of the training center, collaborative training initiatives are ongoing with the University of Technology, Spatial Innovision Limited and other government agencies.

With regard to GIS training, emphasis will be placed on the training and certification of trainers, the development of one new course, and to further expand the facilities to provide canteen and library services. A significant training target is to obtain accreditation from the National Council on Technical Vocational Education and Training by 2003. The Council is also working with tertiary institutions in the region to have courses accredited and have credit points assigned to the courses. These points would be accepted towards degree and diploma GIS programmes.

## 3.4.4.3. Digital Geospatial Data Creation

Fundamental to the optimal use of geographic information systems is the availability of current, complete and accurate textual and graphic data. It is critical that common interest data such as topographic maps, parcel maps, socio-economic and land use data are collected and structured in a database that can be readily available and accessible and which can be used for decision making.

The country's maps are severely out-of-date. The most recent maps are the 1:50,000 metric series that was done twenty years ago and are based on photographs taken in the late 1970's. The last comprehensive large scale mapping of the capital city is over 40 years old and was based on 1950's photographs. Sectoral consultations conducted by the Ministry revealed that 7 priority data sets are missions critical to the national GIS infrastructure. These are base maps, parcels, administrative, environmental, utility networks and transportation data sets and related meta-databases.

The Government is spearheading initiatives to create a comprehensive digital base map and a digital parcel index map of the island. Both mapping initiatives are being executed on a cooperative basis. Various agencies and statutory bodies are contributing their resources -- human, technical and monetary -- to prepare these data sets. These new maps will provide the government and the private sector with data to support location based planning and implementation activities at a fraction of the normal price.

## 3.4.5. Large-Scale Digital Base Maps

On Friday September 27, 2002 the Ministry of Land and Environment received from Space Imaging, USA, the following map products:

- IKONOS precision natural colour 1 metre digital orthophoto maps files for the entire island
- Digital orthophoto map files for Kingston and St.Andrew,
   Portmore, Spanish Town and Port Maria at 1:2,000
- Multi-spectral, 4 metre digital images for the entire island
- Digital surface models for the entire island.

This mapping exercise was made possible through a joint-up government initiative coordinated by the Ministry of Land and Environment, where members of the Land Information Council of Jamaica i.e. government agencies and departments, contributed funds to purchase the maps from Space Imaging, USA, valued at over US \$1 million. The maps have been purchased under the multi-licensing agreement for IKONOS products for Federal, State and Local Government of the USA, at 60% of the original cost.

Over 70 government agencies will receive licenses for a complete set of these digital orthophoto map files. The acquisition of comprehensive allisland digital maps will provide all government agencies and the private sector with current map data to support all their location-based planning and implementation activities at a fraction of the normal price.

The following table details how the maps will be used by a number of agencies.

| AGENCY           | APPLICATION/USE  |
|------------------|--|
| Forestry         | - Base data layer in their GIS based forest land         |
| Department       | use databank   |
|                  | - To maintain their forest inventory                     |
|                  | - Measurement of rate of deforestation and reforestation |
| Water Resources  | - Watershed Analysis and Management                      |
| Authority        | - Flood Plain Analysis                                   |
| Local Government | - Local and Regional Planning                            |
| National Land    | - Creation of cadastral index and map                    |
| Agency           | - Preparation of tax map update                          |

#### 3.4.6. Cadastral Maps

#### **Cadastral Index**

Through a joint-up government initiative the National Land Agency is coordinating the preparation of a digital cadastral index map for the island. The NLA in collaboration with the Forestry Department and the National Works Agency is currently creating the cadastral index for the parishes of Trelawny, St. Ann and Manchester. The World Bank under the Public Sector Modernization Programme has provided funds to outsource the preparation of the cadastral index for Kinston and St. Andrew and St. James. It is estimated that the cadastral index mapping exercise for the island will be completed in two years, at an approximate cost of JA\$51 million, provided that fund and staff are available.

#### **Cadastral Map**

The Cadastral index map for St. Catherine is being used by Land Surveyors under the LAMP to assist in the surveying and tenure Clarification and regularization exercise. Once the targeted parcels under the LAMP have been surveyed, the cadastral index will be upgraded to a digital cadastral map which will have precise data on each parcel.

## 3.5. Constraints

A strong infusion of funds is required if the goals and objectives agreed to by Cabinet in 1996 are to be achieved. Creative means and ingenuity with some support from international lending institutions have been used to implement geographic data management polices to date. Other specific constraints to achieving policy objectives include inadequate staffing and the scarcity of experienced geo-informatics personnel. In addition, growing public expectations are now exceeding the implementation capacity of the Ministry, the LICJ and the Government agencies involved.

## 4. OWNERSHIP, ACCESS AND SECURITY OF TENURE

4.1. Ownership, Access and Security of tenure issues
One of the major problems facing Jamaica, and most developing countries, is the inaccessibility and un-affordability of land to a large portion of the population,

particularly low-income households. The unavailability of legally accessible and affordable land has contributed to the chronic problems of squatting and other illegal development on both government and private lands, sometimes under severely precarious and environmentally unfriendly conditions.

#### 4.2. Land Tenure in Jamaica

## 4.2.1. Land and Emancipation

Emancipation day signaled legal freedom for all those enslaved within the British Empire. Equally important, it signaled the beginning of the struggle for access to land on the plains, its use and ownership in Jamaica and other countries in the Caribbean. In an agricultural economy, freedom would have had little economic meaning without access to productive lands. The English settlers after their arrival in 1655 had been granted large parcels of between 2,000 to 3,000 acres of the best lands. At the time of Emancipation, they were still in control of these large and favourable estates.

During slavery, in addition to working on the plantations, the slaves also grew the ground provisions that fed the whole population including the planters. Ground provisions were grown on hillside lands which were thought unsuitable for estate cultivation. History records that during slavery, the people worked these provision grounds as families, and passed the land down from generation to generation as family lands. They carried their produce from their lands every Saturday night to markets. Market day during slavery was held on a Sunday.

It was expected that these hillside lands, which had been "inherited" by the people for generations would, following the principles of English Common Law, become the property of the people at Emancipation. Indeed, the British Colonial Governor at the time, the Earl of Sligo, made a ruling to precisely that effect. However, the local planters protested and the Colonial Office in Jamaica overturned this ruling of their own Governor, recalling him to Britain and replacing him with a new Governor, Sir Lionel Smith. Thus, on the eve of Emancipation, the people lost access to the land, which had been in their family land for generations.

The Colonial Office went further, for, in addition to the hillside land, there were large quantities of Crown Land and abandoned (ruinate) land, which could still have been bought or used by the people. In January 1836, in order to maintain a labour supply for planters in Jamaica, the Colonial Office advised that facilities for obtaining land by the people when emancipated be diminished and that the price of such lands be fixed so as to place them out of the reach of persons without capital. Ownership of land by the people became next to impossible, except through the granting of land by employers.

It was in an effort to counter this that the Baptists, under the leadership of William Knibb, Phillipo and others, launched the effort to purchase land for the establishment of Free Villages for the people. The formation of independent villages by Christian missions, especially the Baptist Church, was a historic event in the life of Jamaicans at Emancipation.

Since that time, population growth, inequitable economic and other practices have resulted in thousands of Jamaicans becoming dispossessed, unable to afford or to have secure access to land.

#### 4.2.2. Freehold Interest

All land tenure in Jamaica can be classified as either freehold or leasehold.

The origin of freehold land in Jamaica dates from 1655, when England issued Royal Letters of Patent, which were in effect grants covering mainly the low lands. These grants were accompanied by Common Law Titles granted by the English Crown and registered in the Island Record Office in Spanish Town. Eventually, stimulated by a thriving sugar economy, these grants extended into the interior and covered virtually the whole island. The only control exercised by the Crown was the requirement that "Quit Rents" be paid regularly. When these rents fell in arrears the land reverted to the Crown, becoming the basis of Jamaica's state land. The land which did not revert to the Crown formed the basis of Jamaica's large, private land holdings.

The small private land holding system did not develop until the early 19th century following the abolition of the slave trade in 1807 and emancipation in 1838. Small holdings were acquired by grants from landowners, donations of land bought by the churches and distributed to parishioners, squatters and others through land settlement programmes organised by the government.

#### 4.2.3. Leasehold Interest

Leaseholds are interests held by individuals, companies and other legal entities under government or private leases for a variety of uses such as agriculture, housing, industrial, commercial and recreational. Lease terms and arrangements vary depending on a variety of factors. A lease is normally granted for a specific number of years and will usually be subject to certain specific terms and conditions. The factors considered in determining the conditions under which a lease is granted may include the potential/proposed/approved use, the value of the property, the location, the cost of the proposed development and the investor's best amortization period, etc. The government of Jamaica does not normally lease lands for periods in excess of 49 years.

#### 4.2.4. Captured/Squatted

Lands occupied by squatters are called "captured lands". The origin of some freehold land in Jamaica can be traced to squatting. According to the Jamaican Statute of Limitations, possessory rights can be secured on private land after 12 years of peaceful, undisturbed possession. Possessory rights can also be acquired in respect to government owned land, but only after 60 years.

#### 4.2.5. State Land

State lands are lands owned by the Government of Jamaica. The area of these lands is estimated to be as much as 200,000 hectares of Jamaica's 1,099,100 hectares.

## 4.3. Categories of Land Titles

The ownership of the freehold interest in land is proved in Jamaica through two types of titles: Common Law Titles called conveyances and Registered Titles.

#### 4.3.1. Common Law Titles

The Island Records Office at Spanish Town, where Common Law Titles are recorded, was the sole title registry until 1889, when the "Registration of Titles Act" was promulgated.

The Act did not consider the common law title, per se, as conclusive evidence of title and required that persons applying to have land brought under the Act prove a root of title for 30 years.

#### 4.3.2. Registered Titles

Titles issued under the provisions of the Registration of Titles Act, called registered titles, are conclusive evidence of ownership guaranteed by government. The Registration of Titles Act is fashioned after the Australian Torrens System of land registration, but does not make registration mandatory, unless a cadastral plan has been completed by the Director of Surveys and the Minister so declares. Once the land has been brought under the operations of the Act however, all subsequent transfers of the land must be made under the Registration of Titles Act, otherwise the legal estate in the land does not pass.

## 4.4. Government Land Settlements & Housing Schemes

Land settlement programmes in Jamaica involve the sub-division of government lands for settlement by farmers on a freehold basis. The first planned land settlement programme began in 1895, with objectives and features which are similar to present programmes. These include the improvement of living conditions of individuals and families by making lands available at affordable cost, encouraging the creation of owner-operated farms; bringing idle lands into production and reducing the misuse of public lands by squatters. The beneficiaries of these programmes, mainly small farmers, were allowed to pay for the properties over an extended period of time, usually 25 years. The government assumed the responsibility of obtaining for the owner a title to the property, once the land had been paid for.

Following the formation of the Land Settlement Commission in 1935 the number of settlements grew rapidly and this led to the creation of the Land Administration Division of the Ministry of Agriculture in 1938, later called the Lands Department, and now the Estates Division of the National Land Agency.

Land settlements and housing programmes have traditionally been part of the Jamaican Government's social agenda. The aims have been to make land and housing accessible and affordable and to provide security of tenure to lower socioeconomic groups. The price of the land allocated to beneficiaries under these various programmes has normally been discounted/subsidized and in many instances bear no relation to the actual value of the land or infrastructure development undertaken. The high cost of infrastructure, roads, drainage, sewage disposal system, water supply etc and the corresponding budgetary constraints have prevented the required infrastructure for these settlements from being developed and/or properly maintained. Most of the infrastructure developed especially for agricultural parcels does not meet the standards normally required by the relevant authorities to enable the conveyance of registered titles. Thousands of settlers however, have been sold or given permission to occupy lots/houses in these land settlements and housing schemes over several years, some for as many as 40 years, but they have not been able to receive registered titles to their holdings. At times this has resulted in the lack of security with respect to tenure, low productivity, inability to access credit, abandonment and illegal sale/mortgage of whole or part of the holdings in several instances. It is estimated that there are as many as 50,000 parcels of land in Housing Schemes and Land Settlements for which titles have not been issued.

## 4.5. Programmes

## 4.5.1. Titling Activities

In 1989 the GOJ with an IDB loan undertook the Jamaica Land Titling Project. The primary objective of the Project was to assist the Government of

Jamaica in its efforts to establish a land management system that would order and secure tenancy in rural farming areas. Between 1989 and 1996 a total of 13,000 titles were delivered through the programme to beneficiaries on Government Land Settlements. This was the first serious effort by Government to issue titles to beneficiaries of Land Settlement Programmes. During this programme one fifth of the sites examined could not be titled because of a range of problems in identifying proper owners etc.

More recently, in order to facilitate the issuing of titles to persons benefiting from the Land Settlement and Housing programmes, the Government has taken a policy decision to issue titles to those beneficiaries with infrastructure 'as is' and to develop over-time a project to improve on a priority basis the infrastructure needed.

## 4.5.2. Divestment Policy

Government recognizes that it is the largest owner of real estate and is committed in the National Land Policy to ensuring a transparent land acquisition and divestment policy. Analysis of its land inventory indicated that the government owns approximately 45000 parcels, held by over 20 entities. Many of these parcels are underutilized and not properly managed.

The Policy recognized the critical nature of the land tenure patterns of Jamaica and related social and economic implications and stated Government's decision to accelerate its land divestment programme. The policy for lands divestment is intended to alleviate the problems associated with landlessness while motivating the nation to realize higher levels of productivity. This is consistent with Government's privatization policy. A major focus of the programme is to provide land for low-income earners, squatter settlement upgrading and regularization and for government employees. In addition to the lands it already owns, government will, when necessary, acquire lands for future development of infrastructure, provision of social facilities, urban upgrading, housing, commercial and industrial activities as well as for environmental and historical preservation.

## 4.5.3. Divestment Policy Guidelines

In 1996 the Cabinet approved a set of recommendations that enunciated the guidelines, procedures and mechanisms for the divestment of government-owned lands in a fair and transparent manner. The recommendations were developed, using a participatory approach, with a critical examination of documents pertaining to valuation, pricing and divestment of government-owned lands, by a number of senior representatives of government, non-government organization (NGOs) and the private sector. A Land Divestment Manual, incorporating the various

policies, procedures etc was approved and other documents relating to divestment is being prepared to be made available to all relevant government organizations as a guide and to the public for information.

## 4.5.4. Divestment Programmes

Three major programmes have been put in place for the divestment and distribution of land. These include:-

- Emancipation lands
- The establishment of Community Economic Centers
- Operation PRIDE

## 4.5.5. Emancipation Lands

The Emancipation Lands Programme was developed to identify, plan and divest 100 hectares of lands in each parish (where feasible). The lands are being made available to low-income landless families at minimum prices or reasonable long-term leases to undertake a variety of production activities mainly agricultural. Tenure is either freehold or leasehold and is being done either to groups or individuals. The Ministry of Agriculture is responsible for the planning and divestment of the agricultural properties and the Ministry of Land and Environment is dealing with other properties in conjunction with other relevant agencies.

## 4.5.6. 4.4.6 Community Economic Centers

Many members of the informal sector have been undertaking an estimated over 40% of commercial, light industrial and other economic activities in squatted and often unsuitable areas. A significant portion of the country's small-scale economic activities is carried out by such persons and Government has acknowledged that it needs to assist in "formalizing" when feasible this segment of the society. One way is to provide lands and opportunities for them to build their own facilities and to undertake economic activities in a legally acceptable and safe manner. Government agencies have identified a number of sites for the Economic Centres and will continue to develop and implement the programme in partnership with communities.

#### 4.5.7. Operation Pride

In 1995 Government announced that it would begin a major land distribution programme for human settlement development, called Operation PRIDE. This was necessary because a large percentage of the population cannot access affordable land for housing, agricultural, commercial, light industrial and other uses. The Programme for Resettlement and Integrated Development Enterprise (PRIDE) was intended to increase access to land and security of tenure for the landless, the less fortunate in the society and for government employees.

Over the last couple years, Government began implementing the programme on a phased basis, but on the advice of certain professionals involved in the programme, changes were made in the proposed methods of implementation making it into a sites and service programme. Having tried these methods in a number of areas, it was determined that it is not feasible or in the best interest of the majority of the landless, poor and other beneficiaries to pursue present practices, as the resulting costs of the solutions are too prohibitive. Many who were intended to benefit were not doing so. It was intended that by using its lands, Government would be the catalyst for this type of programme and that the private sector, religious and other groups would be encouraged to participate in the programme as providers of land and assist with the implementation. Unfortunately, this has not taken place.

The Government has therefore decided that the original policy and programme strategy that was developed for Operation PRIDE with assistance from various sectors should be revisited and pursued. The communities and groups of persons to benefit from the programme will become more involved in the planning and will manage the development of their communities, with professional guidance. These persons have been using their initiatives and resources to help themselves to secure shelter and provide economic opportunities. The Government, through Operation PRIDE will now act as a facilitator, and a catalyst for the purpose of providing lands and technical expertise etc to these beneficiaries that are chosen through a transparent process. The beneficiaries working with government and other groups will ensure that legal and environmentally safe communities are developed.

Manuals designed and developed to assist low-income communities, including those under Operation PRIDE, to incrementally develop affordable and environmentally sound shelter solutions, are available for use to facilitate the process.

Government's aim is to continue to implement the non-partisan programme in a properly planned and timely manner. It is hoped that through this initiative, the government will stimulate the private sector, NGOs, churches and others to get involved in this national programme which addresses many of the social ills that affect the society. The Programme is viewed by Government as an integral part of its Social Agenda, as it will result in thousands of persons gaining legal access to lands for a variety of uses. Over 20,000 families have already benefited from the programme. It will allow thousands of government workers the opportunity to eventually own a home. It will help to create viable and genuinely integrated communities, ensure sustainable and environmentally safe development, create employment opportunities, reduce violence and crime, encourage social harmony and family unity, and instill in the

beneficiaries the values and attitudes which the society needs for survival and prosperity.

## 4.6. Pricing and Allocation

Affordability has always been one of the major deterrents to the ownership of land by the disadvantaged. Government, in deciding to make lands available to low income families, has instructed that equal consideration be given to women, especially female heads of households and that special allocations be made to young people who are seeking to engage in agriculture and other productive activities.

Government's policy stipulates that lands to be divested will be priced at market value. However, in order to ensure that its social objectives with respect to land ownership are achieved, Government has approved a number of discounts and subsidies for lands which are intended to benefit the lower socio-economic groups:-

It was recognised that even with subsidies, the indigent, the mentally and physically challenged, and the elderly will need special concessions in order to afford safe and suitable places to live. This Government is committed to make available to such persons within settlements such as those developed under Operation PRIDE, lands at "peppercorn" rental, and organize through its indigent housing programme, with the assistance of charitable institutions, NGOs etc. the construction of safe and inexpensive houses. Community groups will be educated to make such persons a welcome part of the communities in which they live.

## 4.7. Squatting

The matter of squatting is of serious concern as it prohibits the orderly and progressive development of land. It also causes the development process to be more expensive due to increased infrastructural provisions. In addition there are social and environmental implications associated with squatting that cannot be overlooked. It contributes to the increase in crime and violence, environmental problems and degradation of the land. Investigations reveal that some squatters are not really poor but having recognized the importance and the value of land, abuse the current system and become squatter landlords. In such cases, several of these squatters own house or houses and land elsewhere, but are of the belief that the illegal action will be regularized. They therefore invade properties in order to stake their "claims" on private and public properties. This problem has now reached the stage where drastic action is needed to stop this scourge.

This phenomenon of squatting has been experienced in Jamaica over a long period of time, but the problem has intensified over the past two decades. Accessibility and affordability of land have been recognized as critical factors affecting the availability of land for low-income households. The nature of squatting has also changed from the trespassing or encroaching of a few persons on government's land to an estimated several thousand persons illegally occupying private as well

as public lands. Many parcels of lands owned by Government and a number of its agencies have been captured.

PRIDE is identified by Government as the best means of providing workable solutions to reduce the incidence of squatting in Jamaica. Where feasible, additional numbers of squatter communities will continue to be regularized, with upgrading of infrastructure and housing being carried out by legal beneficiaries in accordance with approved plans under a proper system of registration. Lands are to be provided to relocate persons who are squatting in areas that cannot be regularized. Additional lands will be allocated to other low-income earners to reduce the incidence of squatting. Squatting is not supported and the Government will continue to relocate where possible and demolish squatter settlements, especially those in areas zoned as road reservations, environmentally sensitive and/or protected areas, and areas identified for national projects and programmes.

## 4.8. Indigent Housing

Government has recognized that there are many persons who cannot access funds to purchase a home. It has over the years provided houses for the indigent, sometimes on lands that these persons can access, and in other circumstances on government-owned lands.

Phase II of the Indigent Housing project, which commenced during 2001, cost J\$100 million. It continued a partnership between central and local Government, NGOs and CBOs for the upgrading and provision of housing solutions for the poor. The new approach, adopted for the administration of the current phase, resulted in the implementation being shared among partners: J\$60 million was channelled through Members of Parliament, J\$26.7 million through Parish Councils and \$13.3 million via NGOs. A total of 440 individuals and 110 couples across the island received housing assistance under the NGO/CBO component, while Parish Councils assisted with the repairs to approximately 4,000 units and the construction of 105 new ones.

# 5. CADASTRAL MAPPING, CLARIFICATION AND TENURE REGULARIZATION

## 5.1. Cadastral, Mapping, Clarification and Tenure Regularization Issues

A major problem affecting land owners has been that a large number of property owners have no registered titles for their land. This situation has negatively affected the ability of homeowners, farmers and business persons to secure mortgages and related financing to improve and develop the properties, especially businesses etc. It also influences the levels of property taxes collected for reinvestment into communities.

There are some 680,000 parcels of lands listed on the property valuation roll in Jamaica. It is the opinion of many professionals dealing with land that if all the illegal sub-divisions were taken into consideration, there could be over 1,000,000 parcels of the lands. The cadastral index currently being prepared covers a small portion of the island and the cadastral map covers an even smaller percentage of the island.

It is estimated that approximately 45% of parcels are not on the Register Book of Titles. This has is own difficulties, resulting primarily in limited documentation as to ownership. This also results in great gaps in the Register. In the absence of a comprehensive cadastral map and with outdated records, the Office of Titles is confronted with the serious issue of dual registration and keeping abreast of various types of fraud.

In 2001, the Government signed an agreement with the IDB to undertake a Land Administration and Management Programme. The major portion of the loan is to undertake a pilot programme to prepare a cadastral map for 30,000 parcels of land in the parish of St. Catherine and to undertake tenure clarification and regularization of these parcels.

## 5.2. Incentives and Financial Considerations

To facilitate the implementation of the tenure clarification regularization and cadastral mapping programme, the government has agreed to provide incentives for voluntary title registration within the project area for up to two years after the project ends in a particular defined area. These incentives will take the form of waivers of taxes and stamp duties for property registration regularization, waiver of sub-division approval fees, and the waiver of Natural Resources and Conservation Authority permit fees where necessary. The project provides legal services through a number of lawyers on its staff for a fraction of the normal cost. These services include probating wills and procuring letters of administration, updating of and adding names to titles among other things.

The project team has negotiated special rates for advertisement pertaining to titles with the daily newspapers. A reduced rate has also been negotiated with Referees for work to be done by them in the project areas.

Approximately 18,000 parcels are expected to receive registered titles during the implementation of the programme. The cost for the title registration and surveying cost under the programme is an average of J\$20,000 (US\$400) per parcel, a fraction of the normal cost. The funds obtained from this activity are to be placed into a revolving fund that will be used to continue the cadastral mapping and tenure regularization programme across the island.

The execution of the component also involves a public education and awareness campaign, as well as institutional strengthening and the application of modern cadastral surveying technologies.

## *5.3. Programme Activities*

## 5.3.1. Public Education and Awareness Campaign

Critical to the success and sustainability of the programme is informing and educating land owners of the importance and benefits of titling. This is ongoing though a variety of means, such as public meetings, use of the mass media and the consultations in the target areas by the field teams.

- Public meetings are held in the targeted areas to inform landowners about the Project and the benefits to be derived. The meetings are usually well attended and the responses to participate in the programme are positive.
- An eight-page supplement on LAMP with emphasis on land registration was published in the Sunday Gleaner of October 28, 2001. This was well received as evidenced by the number of telephone calls to the LAMP Office by landowners. These and other information leaflets and brochures are being distributed in several metropolitan areas where Jamaicans reside.
- Three videos for use in the Campaign locally and overseas were produced along with a number of jingles and are aired in strategic time slots on radio and television.

## 5.3.2. Institutional Strengthening

The project management unit and the Titles Division of the National Land Agency were provided with technical staff, Legal and Paralegal Officers and Land Surveyors to strengthen the agencies capability to manage the additional cases for tenure clarification and regularization. A Legal Officer has also been paced in Spanish Town Resident Magistrate's Court. This Officer is directly responsible for processing Letters of Administration and Probates for beneficiaries under the programme. In addition a Field office has been established to make it as convenient as possible for the landowners to interact with the Field Investigation Team and participate in the programme.

These measures have been taken to ensure that the requisite skills and capacities are in place and can be developed in the agencies responsible for carrying out the national mandate for tenure clarification and regularization without the infusion of loan funds and consultant support.

## 5.3.3. Expansion of the Programme

Plans are underway to make this programme a national one. This National Cadastral Mapping and tenure regularization programme will be implemented through joint ventures with members of the Private Sector and professional groups, over a ten (10) year period. This programme will utilize the technical and management expertise of these groups, in addition

to using modern and appropriate land surveying and mapping technologies. A major objective to having a parcel based map for Jamaica is for it to be used for government's Geographic Information Systems activities. Another major objective is to ensure that as many properties as possible can obtain Registered Titles.

#### 5.3.4. Cadastral Mapping using Modern Techniques

A Cadastral Index using information from the land valuation maps for several parts of the island is being prepared and will be used by surveyors to assist in the cadastral surveying and mapping activities. Once the targeted areas have been surveyed this cadastral index will be upgraded to a digital cadastral map with more precise data on each parcel.

These cadastral maps are being prepared using a combination of traditional and modern equipment and techniques. Global Position System Base Stations, GPS Rovers and optical total stations are being employed in the mapping exercise.

A digital cadastral index and map with its database will facilitate immediate improvements in the computing, comparison, checking and plan preparation. This will positively impact on the preparation of titles and also support land divestment and land valuation activities.

## 5.4. General Programme Issues

A number of additional issues have been highlighted during the implementation of the first phase of this programme. Among them are problems pertaining to squatting and capturing of land, illegal development, matters relating to a traditional form of land ownership termed "family lands" and the need to simplify and in some instances eliminate various aspects of the processes applicable to land registration, transfer and other land related activities.

From an analysis of files prepared for over eight hundred persons interviewed regarding land tenure, over 40% of these persons have made efforts to clarify and regularize their status by in many instances surveying their parcels and making applications for Grants of Probate and Letters of Administration. Many had also contracted the services of Attorneys who had initiated the processes, but in numerous instances found their efforts derailed by high costs and excessive bureaucracy, inclusive of the need for sub-division approval and the securing of Grants of Probate and Letters of Administration in remote estates. Recent amendments to the Supreme Court rules have greatly simplified the Probate and Administration process but with increased costs.

An interesting fact that has been revealed from field activities is that the problem of titling is not confined to bringing properties on to the Register, but in many instance keeping the Register updated. Many properties which are on the register, have reflected no dealing for over one hundred years. There are instances where

individuals occupying various parcels for which in some cases they had secured registered titles have now realized that their properties are part of a larger tract of registered lands which in most instance was brought on to the Register in the early  $20^{th}$  century in the names of persons long dead. In their minds, these parcels were unrelated

#### 5.4.1. Family Lands

The tenure situation becomes more complex as each generation die without making arrangements for the transfer of property and the number of beneficiaries multiplies. This increase in the number of beneficiaries results in what is known as "Family Lands". What this term means is that there are several persons, some living abroad, who are entitled to make a legal claim to the land. In some instances the numbers are so great that no identifiable group can be deemed to be the owner.

Such situations result in unsupervised fragmentation of lands as individuals claim "house spots" and farming lots often with the approval of the matriarch or patriarch who is seen as the person "in charge" of the property. The advent of the National Housing Trust has resulted in contributors attempting to secure documentation for these and other properties in order to access the cheapest source of housing financing available in the island. Many persons' efforts are thwarted, as in several instances the documentation related to the properties are with relatives overseas. Some of these relatives wield economic power, gained by supporting aged relatives and paying various funeral expenses. They are reluctant to part with documents as they see themselves as the fee simple owners and are unwilling to have any activity carried out on the land without their blessings.

#### 5.4.2. Updating Of Tax Roll

The fact that in many instances individuals' claims to properties are tenuous, has affected the revenue departments' abilities to collect property taxes. Fifty percent of persons interviewed who are in possession of land were not on the Tax Roll. Many of these persons express the view that without their names being on the Tax Roll they feel no obligation to pay. Such views may find greater support in light of the recent increases in property taxes. Persons with insecure tenure also feel that it is risky to undertake long-term development of lands and so many erect houses and plant crops that are not of a long-term nature.

#### 5.4.3. Related Costs

The minimum costs related to surveying a parcel of land is US\$300/J\$15,000, Transfer Tax on Death amounts to 15% of improved value, while *inter vivos* transfers attract Stamp Duties and Transfer Taxes of 13%. The minimum total cost associated with bringing the smallest parcel of land under The Registration of Titles Act (where there is no

complexity) is approximately US\$900/J\$45,000.00. When such activities relate to an estate where subdivision is necessary the related costs multiply.

## 5.4.4. Squatting

Many persons are seeking to occupy properties near towns and cities. Because of the unaffordability/unavailability issues, the problem of squatting has become monumental and chronic. Some areas which were reserved as open spaces and others which are environmentally fragile are now being illegally utilized by persons hard pressed to find places to live. Many lack the income to afford formal housing solutions. In many instances these persons occupy plots that are not viable for development, or are contending with legal owners for possession.

Various Ministries and Departments of Government are examining a number of recommendations as listed below, to resolve the issues highlighted.

- The enacting of legislation simplifying the land registration and land transfer processes while reducing the related cost.
- The enacting of new legislations to deal with family lands and the fragmentation of land.
- An organized and sustained land allocation process.
- Continued development of rural communities and road networks to reduce the strain on urban housing.
- A documented process as to the use and development of idle lands.
- A comprehensive educational programme with respect to issues related to land.

## 6. SUSTAINABLE DEVELOPMENT PLANNING

## 6.1. Sustainable Development Planning Issues

Government recognizes that the absence of up-to-date sustainable development plans for the country and most urban areas in Jamaica is negatively affecting the ability of Central and Local Government and their agencies to make timely and informed decisions on development activities including development applications and to guide potential investors wishing to undertake development.

The Town and Country Planning Authority by legislation is responsible for the preparation of the Development Plans supported institutionally by the National Environment and Planning Agency, (NEPA), the KSAC and the Parish Councils as local planning authorities. There are however, problems of limited financial, human and technical resources to review and update existing plans and prepare new plans within the NEPA. This institutional weakness is hindering the objectives of the National Land Policy to ensure the sustainable, productive and

equitable development, use and management of the country's natural resources, including land. Government therefore has been devising new and innovative ways to enable planning to be undertaken.

## 6.2. Land Use Planning

During the preparation of the National Land Policy, a number of policies and strategies pertaining to Land Use Planning were developed. These policies and strategies were aimed at encouraging comprehensive and Integrated Development Plans for defined areas using a participatory approach. Not much work has been done in those areas. Instead much emphasis has been placed on the planning and implementation of a number of sector plans which deal with infrastructure, utilities, social amenities, agriculture, shelter, tourism, manufacturing and other uses of land. Reviewing these has brought further recognition of the need for a common strategy to undertake sustainable development planning by everyone for a number of locations.

## 6.3. A Participatory Model

It has again been decided that a participatory approach to planning must be put in place since it is the most effective method by which sustainable development planning can be undertaken with limited resources. At the same time this would ensure commitment to implementation by the various agencies. This is not to say that participatory planning in Jamaica is a new phenomenon. In fact, as early as 1992 this process was initiated with the preparation of the Greater Montego Bay Development Plan. The national participatory process and framework is now being formalized by the Ministry of Land and Environment with other relevant government agencies, the private sector, local government agencies, parish development committees, NGO's, CBO's, and professional groups.

This process would enable the mobilization of central government resources, technical expertise, private sector knowledge and experience, financial and "in kind" assistance, community participation and local knowledge, and local planning authorities input, to allow a faster and more cost effective method of preparing plans. At the local level, Parish Councils, Parish Development Committees and other community stakeholders are expected to spearhead planning. This is already taking place in a number of parishes where local sustainable planning is being undertaken e.g. in the parishes of Portland and Manchester.

This participatory planning process and framework are being documented to be sent to the Cabinet for approval. Consideration is being given for its institutionalization through planning legislation.

The refining of the participatory planning process and framework is being facilitated through the GOJ/World Bank PSMP and the Land Use Planning and Development Component of the I.D.B./GOJ funded, Land Administration and

Management Programme (LAMP). Through this programme plans are being prepared for the towns of Santa Cruz and Spanish Town.

## 6.4. Planning Activities

The refining of the participatory process now being established and institutionalized for Sustainable Development Planning in Jamaica will accelerate the capacity to finalize a number of plans which are either being completed or being prepared using this process. The areas being planned include the following:

- The Sustainable Development Plan for the parishes of Kingston and St. Andrew being partly funded with a grant from the Cities Alliance Programme
- The Spanish Town and Santa Cruz urban plans which are being done under GOJ/IDB Land Administration and Management Programme (LAMP)
- The Portmore Sustainable Development Plan being done with local resources
- Manchester Parish Development Plan being carried out with assistance from CIDA
- Negril Development Plan done through a local and national initiative
- Greater Montego Re-Development Plan done by a broad base local group. The plan is now being finalized with help from the National Environment and Planning Agency (NEPA)
- Portland and St. Mary Parish Plans being finalized by the Urban Development Corporation

## 6.5. Urbanization

Rapid urbanization of some areas has resulted in major problems such as squatting, unemployment, crime and violence, inadequate housing and social services, inadequate infrastructure, traffic congestion and urban decay.

A number of programmes have been or are being implemented to deal with some of these issues. Among these are tax incentives programmes for blighted and depressed areas, solid waste management programmes, development of open spaces and recreational areas, road improvements and a major inner city and urban renewal programme.

## 6.5.1. Inner City Renewal Programme (ICRP)

The Inner City Renewal Programme (ICRP) was started in March 2001 to stimulate employment and economic activity and to arrest the physical and social decline of inner city and other communities of the Kingston Metropolitan Area. The programme also seeks to empower the residents in the target communities by fostering personal and community involvement and development.

The ICRP is a comprehensive five year plan being implemented on a phased basis to address the full range of issues affecting inner city conditions. The issues are addressed in three basic categories:

- the physical environment including the infrastructure (i.e. roads, drains, sanitation, utilities, etc.);
- commercial, industrial and historic buildings, housing and related amenities; solid waste management and gully clearing among other things;
- the people including social and community development i.e. community empowerment, welfare provisions and miscellaneous services;
- human resource development, health, education, training, etc.; and
- enforcement and capacity building of law and order through the clarification and dissemination of legal requirements and standards, and by consistent policing.

The first phase involves renewal of the Central Business and Market Districts and includes improvement of designated vending areas, the contentious and long standing problem of the relocation of vendors, redevelopment of certain streets and the introduction of a municipal police corps. Derelict and dangerous buildings have been demolished, market streets are to be cleaned, roadways repaired, drains gullies and dumpsites cleaned. Despite setbacks in implementation, Phase 1 with renewed interest by the private sector shows signs of fulfilling its role as a catalyst for the overall Programme. It is expected that the measures implemented will not only stimulate economic activity in the target areas, but throughout the island. Private Sector organizations have been actively planning and determining the types of investments they can make in the area.

Phase 2 is being implemented simultaneously with Phase I. This is for the renewal of 48 communities. Implementation is sequenced to be manageable and affordable. Six communities were chosen with a pilot community being used to determine the kind of resources that would be needed to achieve a measure of success and also to be used as a demonstration area for the overall programme. The achievements so far in the pilot community have had positive impact, directly and indirectly, on close to 4,000 residents.

Work undertaken includes rehabilitation to roads and surface drains, gully cleaning and the removal of debris, upgrading of sewer and sanitation, refurbishing of a Basic School and construction of a Day Care Centre, renovation of the community center and the fishing village, and creation of community economic enterprises.

Simultaneous with the pilot area, planning and preparation for the other communities, consultations, needs assessment and capacity building are well advanced.

Meetings with all the key players are held regularly to assess the progress of the programme and to identify specific areas of follow-up. It must be noted that one of the key strengths of the whole Programme is the strong sense of ownership and support by civil society. The content of the Programme was formulated based on surveys, consultations and broadbased consensus and cooperation with NGOs, private sector and other stakeholders within the communities. The Programme is also actively supported by a wide range of Government and private sector agencies such as the Jamaica Social Investment Fund (JSIF), the Urban Development Corporation, Social Development Commission (SDC), Kingston Restoration Company (KRC) and the National Council on Drug Abuse (NCDA). This is an important characteristic of the programme and players are becoming convinced of their contribution to the success of the programme. Many gains appear to be sustainable, and real capacity building and institutional strengthening are taking place.

## 7. MANAGEMENT OF LANDS

# 7.1. Management Of Land Issues

Jamaica's aim is to manage its lands in a sustainable manner. This is yet to be achieved. Approximately 80% of the island is classified as hill or mountainous, only 13% is classed as either category 1 or 2. There are many categories of land, for which special policies and programmes are being developed. These include:

Agriculture lands Forest Lands
Commercial and Industrial Residential
Mining and Quarrying Transport
Recreational and Resort Watersheds

Parks and Protected Areas

This chapter deals with only some of the areas listed above. Many of these areas are being dealt with through legislation and a variety of policy documents, projects and programmes. Overall management is made more difficult because the necessary databases and development plans specifying zoned areas etc. are presently not in place.

Data on the state of resources is collected biennially by NEPA and STATIN and a State of the Environment Report produced. The last one was produced in 2001. Data feeds into the decision-making process for new programmes and projects and

revisions of existing ones. The Jamaica National Environmental Action Plan (JaNEAP) is another tool for focusing national activities (government, private sector and civil society organisations) towards environmental management, showing where there are gaps and areas for future attention.

# 7.2. Watershed Management

## 7.2.1. Watersheds Issues and Challenges

Jamaica is divided into 26 Watershed Management Units. Each has areas that are considered to be degraded and in need of urgent remedial work to restore them to an acceptable state and to improve the availability and quality of water. Problems associated with watersheds include the following:

- Landslides and slope failures are very common in the non-limestone watersheds due to the presence of steep slopes, thin or erosive soils. This situation is further compounded in all the watersheds by heavy and high intensity rains in the upper watershed areas, soil erosion, and susceptibility to earthquakes. These natural conditions of instability are aggravated by the inappropriate use of slopes, especially poor farming practices.
- The large-scale removal of trees for mining, quarrying, urbanization, housing programmes, squatter settlements, and the illegal removal of forest cover for lumber, charcoal production and yam sticks have greatly contributed to the level of deforestation, calculated by the Forestry Department as 0.1%. Forest fires have also contributed to deforestation especially during extended periods of drought.
- The demand for and pressures on land and water resources have become greater due to increased population and industrial needs. This growing demand for water has not been adequately matched by an increasing societal awareness and understanding of the important linkages between land uses in upper watershed areas and water production.
- Public behaviour and attitudes towards environmental issues (such as illegal logging) can be described as indifferent.
- Large information gaps hinder effective decision-making.
- There is need for more trained and motivated staff in agencies.
- There are conflicting mandates of government ministries and agencies.

Policy measures developed to address the issues and challenges include the Watershed Policy (in draft), the Forest Policy, the Policy for the National System of Protected Areas. They all feature conservation and sustainable use of resources,

cooperative management agreements, community participation, and integrated and collaborative management of resources among other strategies.

Plans and programmes to improve watershed management and promote good environmental practices overall include the National Integrated Watershed Management Programmatic Framework as well as the National Forest Management and Conservation Plan. These two comprehensive documents provide mechanisms for dealing with most of the challenges and are now being implemented. The National Integrated Watershed Management Council has been established by Cabinet to help develop and oversee a coordinated set of programmes and projects to deal with the issues. A number of local committees have been established to deal with issues at the local level. There is collaboration with the Forestry Department that is dealing with the improvements to forest reserves on their lands and encouraging conservation with private sector owners.

The Forest Act and regulations and the Watershed Management Act, now being revised, provide a framework that supports the policies and further strengthens the efforts to manage and rehabilitate watershed and forestry areas.

Projects and programmes ongoing in this area include: EFJ/GOJ Spinal Forest Project; USAID/GOJ Ridge to Reef Project; GOJ Orchard Tree Crop Project; Rural agricultural extension services – including training for use of contouring, mixed cropping, integrated pest management and organic farming; and incentive programmes to encourage the involvement of private sector land owners.

#### 7.3. Parks and Protected Areas

A number of parks have been or are being developed as recreational areas for the public. The National Solid Waste Company is assisting with this activity, as are the National Housing Trust, the Environmental Foundation of Jamaica (EFJ) etc. The EFJ is seeking to find ways to fund and implement a spinal forest programme for the country. The Nature Conservancy is involved in a number of initiatives and is working in the Cockpit Country. The National Environmental and Planning Agency has declared a number of protected areas and marine parks. Nongovernment organisations are managing some of these protected areas and parks. Management capability and reducing sources and amounts of funds for NGOs pose a problem with this approach.

A major issue to be resolved is the fact that large sections of the island which are privately owned should be protected areas or forest reserves or be used for commercial forests. Many of these areas are in need of proper management. Government is therefore considering and has begun to use various means, whether by suasion, "buy-in" and or the provision of incentives to enable private owners to manage these areas properly, to develop commercial forests and to implement sustainable reforestation practices.

# 7.4. Coastal Zone Management, Issues And Challenges

Jamaica like many other Caribbean states have their main urban settlements and tourist developments situated in coastal zones. The management of coastal areas is therefore of crucial significance to Caribbean territories. The following are some of the issues pertaining to coastal zones:

- Coastal Zone Management is a necessity, in view of competing interests and complex influences.
- Development in coastal areas takes place without due regard to the effects of the increased pressures created.
- Pollution, beach erosion and illegal sand mining pose a threat to beaches, the tourism industry and the enjoyment of local, as well as near shore fisheries.
- The area of wetlands is decreasing.
- Degradation of coral reefs threatens the fishing and tourism industries.
- Jamaican waters have been declared the most over-fished in the CARICOM area.

The formation of the Council on Oceans and Coastal Zone Management and the development of a National Policy on Oceans and Coastal Zone Management for Jamaica (2002) are major initiatives regarding integrated coastal zone management. The Action Plan on CZM, attached to the policy, is now being implemented, and it is expected that improved coordination and collaboration will take place among the sectors impacting the coastal environment.

Plans and projects include the Jamaica Coral Reef Action Plan, USAID/GOJ Coastal Water Quality Improvement Project, Kingston Harbour Rehabilitation Programme and its sub-activities/projects.

Consideration is being given to modifying some existing pieces and creating a new overarching legislation dealing with costal zone management. A Beach Policy has been prepared and is being discussed for finalization. The Tourism industry is important to Jamaica as in other Caribbean territories and this creates a great demand on infrastructure and the need to manage the beaches and coastal zones areas.

# 7.5. Land Mining

For many years a number of persons in Jamaica have been involved in the mining of minerals from the land as an commercial venture. Mining can be differentiated between minerals and quarry materials. The Mining Act governs all minerals such as bauxite, gold and marble defined under the Crown, while quarry materials are the property of the landowner.

Mining areas are generally located in the rural and semi-rural areas where other forms of employment other than agriculture are not easily available. The wages paid to mining/quarry workers are usually higher than in the few other forms of readily available employment, particularly for low-skilled labour. Mine operators

therefore find it very easy to obtain help in their operations, whether legal or illegal.

Government's legal framework concerning mining and quarrying has been mainly captured in the Mining Act and the Mineral Vesting Act. These Acts provide for the activities to be carried out in an orderly manner and only when authorized by a mining lease or a quarry licence granted by the Minister. This allows for proper land use planning, the protection of life and property, sanctions against illicit mining and quarrying, while at the same time enabling the development and utilization of mineral resources for personal and national benefits.

### 7.5.1. Illegal Quarrying Practices

Not withstanding the laws and regulations that are put in place, there are still a number of factors which influence the occurrence of illegal quarrying/mining. Some are socio-economic factors while others are attributable to weak or altogether absent support offered by the justice system against offenders. Over the years the responsible Ministry and the Mines and Geology Division have implemented measures to combat illegal quarrying/mining, and so the problem is being somewhat abated. These measures include the establishment of Monitoring Committees to monitor and regulate licensed quarry operators and to also investigate and expose alleged illegal ones. Other measures include promotion of manufactured sand as a substitute to the mined sand and also information to make the public aware of the dangers and penalties associated with illegal and improper quarrying/mining.

#### 7.5.2. Management of Mineral Bearing Lands

The Ministry of Land and Environment, the Mines and Geology Division, the Jamaica Bauxite Institute and other appropriate agencies are in the process of implementing a coordinated programme to ensure the efficient protection of the country's mineral wealth. This is important since large areas of mineral bearing lands and minerals resources are being sterilized particularly by housing settlements.

It is also important to examine the extent to which good agricultural lands are being utilized by the mining/quarrying sector. It poses a challenge to the authorities to establish a balance between those two sectors because lands which are mined, even when reclaimed, often cannot support the type of agriculture that it did in its original state. Therefore it is incumbent on the authorities to set up proper zoning of these activities.

### 7.5.3. Land Rehabilitation and Subsequent Use

One of the philosophies of the mining and quarrying sector is the restoration of excavated land and subsequent land use. In this regard lands which have been mined or quarried are to be rehabilitated for other uses.

The bauxite companies have been obligated under the 1947 Mining Act to restore mined out lands.

The restoration of quarries is a more recent requirement as quarrying was thought to be levelling hills, thus providing more productive lands as is the case in various parts of Jamaica where the floor of the old quarries are used to construct houses and other buildings.

It is worthy of note that when agricultural lands are mined out, even if some amount of reclamation is done, it is not able to support the economic levels of agriculture that it did in its original state, over a short period of time. To improve the state of these reclaimed lands, the planting of pasture grasses or other shallow rooted crops is usually recommended for a period of not less than 10 years. This normally improves the fertility of the soil by stimulating the humus level at a faster pace while feeding on the thin layer of top soil that is used in the reclamation process.

Experience has shown that if the conditions of the licence are not met and even after a series of warnings the operator continues to be non compliant, then the Commissioner must exercise his rights to close the quarry. When this has been done the land is most likely left in a state where no economic activity can take place. Bonds posted by legal mining and quarry operators can be used for reclamation purposes.

# 7.6. Disaster Mitigation And Preparedness

### 7.6.1. Disaster Mitigation and Preparedness Issues

Land is a limited natural resource in small economies and Island States in particular. In Jamaica, as in many other small island states, there have been significant increases in population over the past decades, especially in urban areas. This had led to an increase in the population at risk from the occurrence of natural hazards.

In addition, many users of lands that were traditionally regarded as marginal or unsafe have been brought into use either by inadequate planning or by informal settlements. The use of these lands may perhaps be inevitable given the need for land by lower socio-economic groups and the constraints of Governments in Small Island States to make land available to large sections of society at affordable prices.

In addition to having almost two thirds of the Jamaican population living in coastal towns and cities, there are also issues pertaining to inadequate urban infrastructure. Low lying residential areas in close proximity to the coasts are particularly vulnerable to damage from hurricanes, storm surges and other natural hazards.

Disaster victims are not the only ones who pay the consequences of living in disaster prone areas. Disasters also divert funds from other important programmes resulting in derailment of planned Government activities, and in most cases economic setbacks.

This therefore predicates prudent management, which can only be accomplished with the help of proper land use planning and the development and implementation of mitigation policies.

### 7.6.2. Mitigation

Against this background, mitigation has to be seen as mandatory. The reduction in the long term risk to people and property determines that natural hazard mitigation policy be formulated.

Jamaica is currently in the mid stages of the formulation of such a policy. A Discussion paper entitled "Discussion Paper – Toward A National Hazard Mitigation Policy" has been developed by the Office of Disaster Preparedness and Emergency Management and is scheduled for completion by end of 2003, with support from the Caribbean Development Bank (CDB).

A National Seminar is planned for late April, at which time a review of the current document will be undertaken with the intention of making provisions for added inputs.

The outlook is for the promotion of the use of Hazard Maps and to seek to integrate their use in the development planning process through the Parish Councils and the NEPA..

There is however greater need for the incorporation of more scientific information to drive the mitigation process, as well as the inclusion of more technological tools such as Geographic Information Systems to assist in vulnerability analyses.

Cultural understandings such as "Acts of God" demonstrate the need for greater public education and awareness and as such community level disaster management programmes will form a major part of the mitigation policy activities.

# 7.7. Management Of Land Programmes

Government owns approximately 22% of all lands in Jamaica and therefore has the responsibility for its efficient management and divestment. In order to properly execute its mandate, a number of programmes have been implemented.

### 7.7.1. Digital Land Inventory of State Land and Buildings

In 2000, the Government began implementing a Government land inventory programme. The data sets required for the creation of the database for the management of land and buildings have been identified and the database structure defined. Officers from Parish Councils and agencies such as the Urban Development Corporation have begun the data collection exercise for lands that they own and control.

### 7.7.2. Managing Urban Areas

This is to be improved through the establishment of Municipalities, the first of which is being organised for the dormitory town of Portmore in St. Catherine. Through the inner city programme a number of areas are identified for improvement with the involvement of the stakeholders in and around the community. Sustainable development plans are also being undertaken for a number of urban areas.

#### 8. INSTITUTIONAL FRAMEWORK AND REFORM

## 8.1. Institutional Framework And Reform

In 2000, the Government created the Ministry of Land and Environment, demonstrating its commitment to ensure the effective management and administration of land and the sustainable planning, conservation and development of the island's natural resources. It signaled Government's recognition of the need to facilitate long-term objectives for achieving economic, social and physical development and to ensure a better quality of life for present and future generations. Two Executive Agencies have also been formed under the Ministry to carry out the activities to achieve the objective. Assistance to make the changes necessary was provided through the GOJ/World Bank funded Public Sector Modernization Programme. Some of the major objectives in making the changes were: training, employing qualified and experienced staff, setting up modernized and technologically equipped offices, a change in culture and approach to dealing with issues and customer friendly attitudes.

# 8.2. The National Land Agency

The National Land Agency comprises the former Office of Titles, Survey Department, Land Valuation and Estates Department. They are responsible for the implementation of several of the goals and objectives of the 1996 National Land Policy.

Among the Agency's objectives is an efficient approach to streamlining the administration and management of land, in particular government owned lands. The Agency is undertaking programmes to:

- establish an efficient and transparent land divestment and land titling system.
- create modern cadastral and other maps for Jamaica.

• develop modern information systems to support the sustainable development of Jamaica's resources.

The merger has enabled the Government to provide more efficient services such as:

- **Business process improvements** to reduce the time it takes to secure a title.
- Computerization of data and on-line access to clients, such as lawyers investors, real estate dealers and developers.
- **Single window access** to all the services provided by the Agency.
- The establishment of an Internet based service to enable all government agencies, local government and private sector organizations, access land information.

# 8.3. The National Environment And Planning Agency

The National Environment and Planning Agency was created through the merger of the former Town Planning Department the Land Development and Utilization Commission and the Natural Resources Conservation Authority.

The establishment of this Executive Agency sought to ensure: the protection and efficient use of limited human and physical resources; a more integrated approach including public participation to planning for sustainable development; resolution of overlaps in formulation and enforcement of environmental and planning policies and legislation to ensure effective overall management of land. This more effective institutional framework is designed to help resolve conflicts between environmental and development interests when considering appropriateness of development proposals. One objective is to significantly reduce the time period to review and process applications for environmental, subdivision and development approval.

The core functions of the National Environment and Planning Agency are:

- Policy and programme development;
- Sustainable Development planning,
- Environmental and natural resource database maintenance and mapping;
- Monitoring Compliance and enforcement;
- Habitat Protection, Biodiversity Conservation, Parks and Protected Areas.
- Coastal Zone, Watershed and Pollution Management Operations;
- Application approvals;
- Environmental education and public information services;

The MLE, NEPA and other stakeholders are in the process of developing a National Planning Process and Framework and a National Environment and Planning Strategy. The framework and strategy will guide the planning and

environmental activities and facilitate the preparation of recommendations to Cabinet for the better management of existing human and other resources.

### 8.4. Local Government Reform

#### 8.4.1. Local Government Policy

Government's policy on Local Government is based on the conviction that despite the shortcomings of the existing system, a strong and vibrant system of Local Government is essential to creating a society in which all citizens enjoy real opportunities to fully and directly participate in and contribute to the planning, management and development of their local communities, and by extension, of the nation. Such involvement is not only desirable, it is also an excellent means of safeguarding and deepening the democratic process while promoting equal rights and social justice. It is also proving to be a framework for utilizing the creativity, initiative and talents of the total Jamaican people and channeling these towards the solution of local problems as well as those of the nation as a whole.

Consequently, it was discussed and felt that the answer to dissatisfaction with the past performance of Local Government cannot be to dismantle or downgrade the institution, but to identify the causes for such non-performance and devise appropriate solutions to those problems.

Additionally, the Government perceives both Local Government and Community Development as being complementary processes through which it can achieve its focal objective of empowering citizens to enjoy greater self-management over their own affairs and take initiatives towards, and responsibility for, determining and solving their own problems. A major focus of Government's policy is therefore to deepen the integration between these two processes.

The specific objectives of the Reform Programme are:

- Restoration of functions and responsibilities, which were removed from Local Government, and rehabilitation of the Councils.
- Establishment of new arrangements for the financing of Local Government which will allocate to them adequate and independent sources of revenue, and will give Local Authorities effective control over these sources of revenue.
- To up-grade the institutional capability of Local Authorities to ensure that they are able to perform their functions in an efficient and cost-effective manner, and are enabled to take on the new challenge of providing leadership and coordination in the process of community development and empowerment.
- To effect a comprehensive revision of all out-dated legislation which presently constitute a major constraint to the effective performance of the Councils.

- To up-grade the quality and cost-efficiency of all Local Government services and regulatory functions.
- To shift the focus of Local Authorities to one of providing leadership and a coordination framework to the collective efforts of the people of their respective Parishes, towards local development.
- To examine the present distribution of service responsibilities between Central and Local Government, community organizations, NGOs and the private sector, and to identify better or more cost-effective arrangements for the delivery of these services.

The Local Government Reform Process was launched in 1994. The present Government of Jamaica firmly believes that there is no substitute for the direct involvement of the public and their comments in the decision making process. A strong and vibrant system of decentralized administration is essential to the achievement of good governance. The Government seeks to create modern Local Authorities with the capacity, vision and resource base necessary to deliver the range of services for which they are responsible, as well as appropriate mechanisms for accountability and transparency.

## 8.4.2. Revision of Legal Framework

Against this background, the Government of Jamaica's programme of decentralization and reform recognized the necessity for, among other things,

- new legislation to provide a legal framework to facilitate change
- the broadening of responsibilities and functions of local authorities
- the provision for a sound financial base for the authorities to fulfill their new mandates
- mechanisms of inclusion to broaden the participation of stakeholders
- streamlined mechanisms for transparency and accountability

## 8.4.3. Legislation

Legislation has been enacted to provide a sound basis for the reforms in keeping with the decentralization/efficiency thrust. New legislation gives Local Authorities more autonomy in governance and control over local rates, fees, and user charges, and also in respect to making bylaws/regulations on matters over which Local Authorities have jurisdiction. Legislation has also been enacted to designate specified types of taxes as dedicated local government revenues, and the scope and capacity of Local Authorities to manage their own finances have been significantly enhanced.

A total of 66 laws have been identified and grouped into 4 broad categories. Twenty-one laws are currently under review for amendment.

Amendments are being drafted for 3 laws: Parochial Rates & Finance (Amendment) Bill, Keeping of Animals (Amendment) Bill and Pound (Amendment) Bill. Drafting instructions have also been issued by Cabinet for the Property Tax (Amendment) Bill. A further 7 Acts are in the policy development stage.

In the final analysis, it is the modernization of the legal framework that will guarantee the sustainability of these reforms. The new legal framework must therefore recognize and facilitate the following priority activities in this phase of Local Government Reform:

- Specific mechanisms for *participatory democracy* such as Parish and Community Development Committees
- Inclusion of private sector and civil society on all Committees of Local Authorities
- Establishment of *City and Town Councils*
- Direct election of Mayors and Chairpersons of Local Authorities
- Measures for accountability and transparency
- Measures to improve compliance in payment of *property taxes*

## 8.5. Training

Integral to the strengthening and capacity building for land administration and management, physical planning, implementation and management capabilities throughout the Caribbean, is the development of technical and managerial expertise in these disciplines. The Governments of the region and international funding institutions (the IDB and the World Bank) are devoting large amounts of resources to reform land management systems, undertake cadastral mapping and tenure regularization activities, strengthen institutional capacities of management agencies and establish or improve geographic information systems. There are, however, problems with sustainability. Many government agencies cannot compete and lose their skilled staff to the private sector, or along with the private sector suffer from the brain drain to the developed world.

Jamaican institutions have been undertaking various aspects of training for students in planning and land administration and management.

#### 8.5.1. The University of Technology, Jamaica

The University of Technology (UTech), Jamaica was established in 1958, originally under the name The Jamaica Institute of Technology. In 1959, the name was changed to the College of Arts Science and Technology (CAST). Granted University status in September 1995, UTech is at the pinnacle of technical education in the English-speaking Caribbean, providing managers and skilled professionals for Jamaica and the region in a wide diversity of disciplines.

The University of Technology, Faculty of the Built Environment offers training for persons who wish to work in the areas of land development,

administration and management. The School of Building and Land Management (formerly Building Department) is one of two schools in the Faculty of The Built Environment. The School of Building and Land Management (SBLM) provides education and training in construction engineering and land management in the fields of Construction, Land Surveying, Land Economy & Valuation Surveying, Physical Planning and Quantity Surveying.

At present the school has over 400 students undertaking full-time, part-time or modular training programmes. Many of the programmes involve participation with the associated professional bodies and Government Ministries. The School therefore attempts to produce a wide range of manpower skills to meet regional needs.

The following tables shows the programmes offered by the school and their duration.

#### **DEGREES**

| Degrees                      | Duration                            |
|------------------------------|-------------------------------------|
| Construction Engineering and | Three (3) Year Summer Modular,      |
| Management                   | Post-Diploma                        |
| Urban and Regional Planning  | Development - One (1) Year Full-    |
|                              | time/Two (2) Years Part-time, Post- |
|                              | Diploma                             |
| Surveying and Geographic     | Four (4) Years                      |
| Information Sciences         |                                     |
| Construction Engineering     | Four (4) Years                      |
| Quantity Surveying           | Four (4) Years                      |
| Land Economy and Valuation   | Four (4) Years                      |
| Surveying                    |                                     |

### **DIPLOMAS**

| Diplomas                 | Duration                                       |  |
|--------------------------|--|--|
| Construction Management, | Three (3) years full-time                      |  |
| Land Economy and         | Three (3) Years Full-time/Four Years (4) Part- |  |
| Valuation Surveying      | time Day Release                               |  |
| Land Surveying           | Three (3) Years Full-time                      |  |
| Physical Planning        | Three (3) Years Full-time                      |  |
| Technology               |  |  |
| Structural Engineering   | Three Years (3) Full-time                      |  |
| Quantity Surveying       | Three (3) Years Full-time                      |  |

#### **CERTIFICATES**

| Certificates              | Duration                              |
|---------------------------|---------------------------------------|
| Construction Technician   | Three (3) Years Part-time Day Release |
| Land Surveying Technician | Two (2) Years Full-time               |

#### SPECIAL PROGRAMMES

- Real Estate Dealers Course, Six (6) Months Part-time
- Real Estate Salesman Course, Four (4) Weeks Full-time

It should be noted that the school offers full time, part-time, evening and day release programmes for a number of its courses with cater to the need of the working individual who wishes to pursue further studies.

## 8.5.2. The University of the West Indies, Mona

The University of the West Indies, Mona is a dynamic, international institution serving the countries of the Commonwealth Caribbean. The University began at Mona, Jamaica, West Indies in 1948 as a College of the University of London. It achieved full university status in 1962. The UWI is the region's premier educational institution. Its faculties offer a wide range of undergraduate, masters and doctoral programmes. There is a strong emphasis on Caribbean issues making the UWI the ideal educational institution for local and international students with an interest in Caribbean society.

Total enrolment: Approximately 11,000 50% of undergraduates are under age 25 68% of postgraduates are over age 30 2% of all students are over age 50

The Environmental Management Unit (EMU) was established in September 1998 in the Faculty of Pure and Applied Sciences, Department of Geology and Geology. It was formed to address environmental management needs nationally and regionally.

The unit offers a Master of Science degree in Integrated Urban and Rural Environmental Management. The programme has been sponsored by the European Union. In 2001 fifty-seven students had completed the programme. They have contributed to environmental research in many themes throughout the region in areas such as Watershed Management, Parks and Protected Areas and Environmental Health. Many graduates are now contributing to the sustainable development process in public and private sector bodies, secondary and tertiary institutions, international agencies and non-governmental organisations throughout the region.

#### 8.5.3. Regional Training Initiatives

The need to develop and ensure the availability of education and training in Land Administration and Management and related disciplines has received much attention from Government Agencies, training institutions and professional associations in the region.

In November 1998, a Caribbean Workshop on Training and Education for Resource Management and Property Studies was held in Portland, Jamaica. Participants from major tertiary training and government institutions throughout the Caribbean and the Centre for Property Studies, University of New Brunswick attended. They examined training, education and professional development needs, constraints faced by learners, the use of learning technologies and modes, identification of curricula for various learner groups, identification of educational institutions best suited to participate in course development and execution and outlined possible solutions. Also discussed were entry levels, the availability of qualified trainers in different countries, transferability of credits, accreditation and certification. A plan of action was developed to move forward.

A further meeting of a smaller group was held in February 1999 in Port of Spain, Trinidad coordinated by the UWI St. Augustine and the Ministry responsible for physical planning and settlements with support from the Centre for Property Studies. A number of priority areas, which have been identified in Jamaica, were confirmed at the Trinidad meeting. The areas identified for increased emphasis on training were:

- Land administration and management
- Geographic information systems and global positioning systems
- Planning Technology

Follow-up meetings have not been held but the UWI, St. Augustine has carried the process forward by undertaking the necessary work to establish a programme for Land Administration and Management. Funding is needed to assist with this effort and to develop the specific areas of activities identified at the meetings.

### 9. CONCLUSION AND RECOMMENDATIONS

#### 9.1. Conclusion And Recommendations

Every administration, from the time of Jamaica's independence in 1962, has in one way or another attempted to address problems related to land administration and management. The result has been a variety of programmes including: land settlements, land lease schemes, integrated rural development programmes with settlement components, pioneer farms for landless youths, emancipation lands, Operation PRIDE, Land Titling, Land Administration and Management

programmes and others. These measures have and are being met with varying degrees of success in dealing with many of the problems identified.

The Government of Jamaica remains committed to achieving sustainable development and the proper administration and management of the country's natural and man-made resources. This is exemplified in that it is one of the few countries in the world to have developed a comprehensive National Land Policy and have began to implement projects and programmes to address the issues as identified.

Though the country has had a number of successes, there are many issues still to be addressed, programmes to be strengthened, and work to continue.

### **Some Areas Requiring Further Work**

- Revision of the National Land Policy and a review of the implementation that has taken place to date
- Establishment of a National Process and Framework for Sustainable Development Planning. The continued preparation of sustainable development plans for the country at a local, regional and national level
- Finalize a programme of action for the administration and management of all lands and in particular government owned lands
- Creation of a comprehensive database for the management of government lands and buildings
- Finalization of guidelines and standards for development
- Legislative reform
- Education and training in land administration and management
- Creation of national and regional spatial data infrastructures

Significant improvements are evident in the modernization of the institutions that administer and manage land and in the greater efficiencies in the delivery of services to the public. These are in the areas of providing land information through the new "elandjamaica" Internet services, the reduced turn-around time to process development plans, environmental permits and licences, subdivision plans and the registration of interests in land.

Various countries in the region expend funds on similar areas, with little or no attempts to learn from each other or to deal with areas of common interest in a coordinated manner. In addition several Governments are in the process of initiation or implementation of projects and programmes dealing with Land Policy, Administration and Management. There are numerous areas where

coordinated regional activities can result in tremendous savings to the countries concerned if they worked together more closely.

Caribbean countries with limited resources should seek to ensure that initiatives undertaken yield benefits to as many sectors as possible. Land management and GIS programmes should be developed and implemented in a coordinated manner across sectors and islands in order to attain not only national, but also regional benefits and savings.

## **Regional Recommendations**

- In this regard it is being proposed that a Regional Policy and a model framework Plan be prepared which detail the methodologies and guidelines required for successful land administration and management at the national level. The Policy and Plan will serve as guides to be adopted/adapted and used by all countries in the region.
- Establish a regional GIS network to promote the coordination of GIS development and technology transfer within the region to ensure savings of major proportions through co-operative efforts.
- Prepare guidelines and Terms of References for the preparation of National Land Policies by different countries. These can be adopted/adapted to such specific circumstances as required. Use networks such as the ECLAC's Planners network to share experiences etc.
- Develop modular, cross-institutional training programmes comprising of an agreed set of courses for land administration and management, GIS/GPS and for planning technicians.
- Develop model legislation for a number of areas of interest to the region.
- Develop regional minimum starter standards for infrastructure development with a policy of incremental development by beneficiaries.
- Establish an information network/clearing house of land administration and management and environmental related projects, topics and issues in the region for the exchange, management and updating of information.

# **APPENDIX I:** Key Social Indicators

**Total Population**: 2,599,334 (2001 Census)

**Number of Households:** 723,343 (2001)

**% Growth of Population**: 0.6 % (2001)

**GDP/capita**: J\$128,271 (2001)

| GDP by major sector: 22,883.3 (Million) | Agriculture, Forestry & Fish       | ing -          |          |
|---|------------------------------------|----------------|----------|
| 22,000.0                                | Mining & Quarrying                 | - 14,820.1     | 46       |
|   | Manufacturing                      | - 46,554.0     | "        |
|   | Electricity & Water                | - 14,124.7     | "        |
|   | Construction and Installation      | - 34,762.6     | 44       |
|   | Distributive Trade                 | - 71,590.2     | 44       |
|   | Transport, Storage & Communication | on -           | 37,808.8 |
| 66                                      |                                    |                |          |
|   | Financing & Insurance Services     | -              | 21,563.4 |
| "                                       | _                                  |                |          |
|   | Real Estate & Business Services    | - 21,563.4     | "        |
|   | Producers of Government Services   | - 40,295.8     | 44       |
|   | Miscellaneous Services             | -              | 23,862.5 |
| "                                       |                                    |                |          |
|   | Household & Private Non-Profit     | Institutions - | 2,100.2  |
| 44                                      |                                    |                |          |
|   | Less Immed Donk Comics Change      | 17 240 1       | "        |
|   | Less Imputed Bank Service Charge   | 17,249.1       |          |
|   | Total GDP at Current Prices        | 334,698.7      | "        |
|   | Total 321 at 3affont Theos         | 221,020.7      |          |
|   | Plus Value Added Tax (GCT)         | 23,337.3       | "        |
|   |                                    |                |          |
|   | Total GDP at Purchasers' Price     | 358,03         | 6.0      |
| "                                       |                                    |                |          |

# **APPENDIX II:** Key Land Indicators

#### **Land Tenure Information**

Total Number of Land Parcels: 676,584 (approximate figure)

Total Acreage: 1,099,100 hectares

Number of parcels: <u>Private</u> <u>Public</u>

633,130 43,454 (93%) (7%)

Number of parcels: <u>Urban</u> <u>Rural</u>

257,102 419,482 (38%) (62%)

## **Land Transaction Information**

| Major Land Transactions   | 1998   | 1999   | 2000   | 2001   |
|---------------------------|--------|--------|--------|--------|
| Application to bring land | 960    | 695    | 767    | 969    |
| under the Registration of |        |        |        |        |
| Titles Act                |        |        |        |        |
| Transfers                 | 11,957 | 10,687 | 11,995 | 12,760 |
| Mortgages                 | 13,727 | 11,721 | 12,005 | 13,732 |

## Number of Legal Transaction in the past 5 years: 408,460

(293,460 from the Land Titles Division and 115,000 from the Land Valuation Division)

**Number of Titles:** 525,293 (up-to-date)

**Number of Leases:** 100 (estimate for the past 5 years)

# **APPENDIX III: Adjudication**

Within the juridical cadastre, there are four main operations, each of which provides land information.

• Adjudication is the official determination of rights in land. It is the process whereby the existing rights in a particular parcel of land are finally and authoritatively ascertained. It is a prerequisite to registration of title and to land consolidation and redistribution. There is a cardinal principle in land adjudication that the process does not alter existing rights or create new ones. It merely establishes what rights exist, by whom they are exercised and to what limitations if any, they are subject. The process may proceed sporadically or systematically. By sporadic it is meant "here and there", "now and then", namely whenever or wherever there is demand or other reason for determining the precise ownership of an individual parcel. Under this approach, parcels are brought onto the register in a piecemeal, haphazard, and unpredictable manner. The systematic approach, on the other hand, implies a methodical and orderly sequence in which all parcels are brought on the register area by area.

The adjudication exercise entails a two stage process -- adjudication of boundaries and adjudication of ownership. The adjudication of boundaries, which has to be completed before the adjudication of ownership, can be defined as the process whereby the limits of the land parcels are determined and agreed upon by all interested parties.

The results of adjudication should be displayed in some public places and landowners permitted a limited period of time to appeal against the decisions if they have grounds for doing so. Once this is settled, the results can be documented and the application to register the land prepared.

- **Demarcation** is the marking of the boundaries of land parcels on the ground.
- **Survey** means the taking of measurements and the setting of survey marks for the purpose of defining any boundary of land, but does not include:
  - a. the bushing of lines between established survey marks;
  - b. or a preliminary lay-out preparatory to a survey.
- **Registration** is the process by which land is brought under the operations of the Registration of Titles Act.